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AB

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/163,068	09/29/98	MURPHY	Q LYNN/0088

STREETS & ASSOCIATES
P O BOX 1612
CYPRESS TX 77410-1612

QM02/0411

EXAMINER

TRAN, B

ART UNIT	PAPER NUMBER
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3748

6e

DATE MAILED: 04/11/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/163,068

Applicant(s)
MURPHY

Examiner
Binh Tran

Group Art Unit
3748



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☒ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 2 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-36 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☒ Claim(s) 1-36 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Sep 29, 1998 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4, 5

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters:

IN THE DRAWING:

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “*a third control valve providing fluid communication with the internal combustion engine*” and “*providing hydrogen fuel to the internal combustion*” in claim 1, must be shown or the feature(s) canceled from the claim(s). *No new matter should be entered.*

IN THE CLAIMS:

3. Claims 1-36 are objected to because of the following informalities: The claims are replete with alternative and unclear language too numerous to mention in every instance. The following are several examples:

-In claim 1, line 13, “*a component selected from HCs, CO or combination thereof*” should be changed to --- *a component selected from any one of HCs, CO, and combinations thereof* ---.

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-In claim 5, line 2, “ *continuously or discontinuously*” should be changed to —*selectively continuous and discontinuous*“.

-In claim 8, line 2, “ *no catalyst capable of oxidizing nitrogen*” should be changed to —*no catalyst for oxidizing nitrogen*“. Appropriate correction is required in response to this action.

Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire TWO MONTHS from the mailing date of this

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of three patents:

Collier, Jr. et al. (Patent Number 5,787,864) discloses method of using hydrogen enriched natural gas as a motor fuel with variable air fuel ratio and fuel mixture ratio control for an internal combustion engine.

Glynn et al. (Patent Number 4,442,801) discloses an electrolysis fuel supplementation apparatus for an internal combustion engine.

Krutzsch et al. (Patent Number 5,921,076) discloses a process and apparatus for reducing emissions from the exhaust gas of an internal combustion engine.

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Appleby (Patent Number 5,813,222) discloses a process and apparatus for reducing emissions from the exhaust gas of an internal combustion engine.

Soichi (Patent Number JP 4,318,214) discloses a process and apparatus for reducing emissions from the exhaust gas of an internal combustion engine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (703) 305-0245. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (703)308-2623. The fax phone number for this group is (703) 308-7763.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

BT

April 10, 2000

Binh Tran
Patent Examiner
Art Unit 3748

Thomas Denion
THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700